

EC axial fan - ESM

sickled blades (S series)

with full round nozzle

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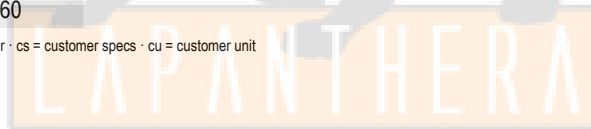
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Nominal data

Type	W1G250-CH67-52	
Motor	M1G074-BF	
Nominal voltage	[VDC]	48
Nominal voltage range	[VDC]	36 .. 57
Type of data definition		rfa
Speed	[min ⁻¹]	2750
Power input	[W]	105
Current draw	[A]	2.6
Min. ambient temperature	[°C]	- 25
Max. ambient temperature	[°C]	+60

ml = max. load · me = max. efficiency · rfa = running at free air · cs = customer specs · cu = customer unit
Subject to alterations



Technical features

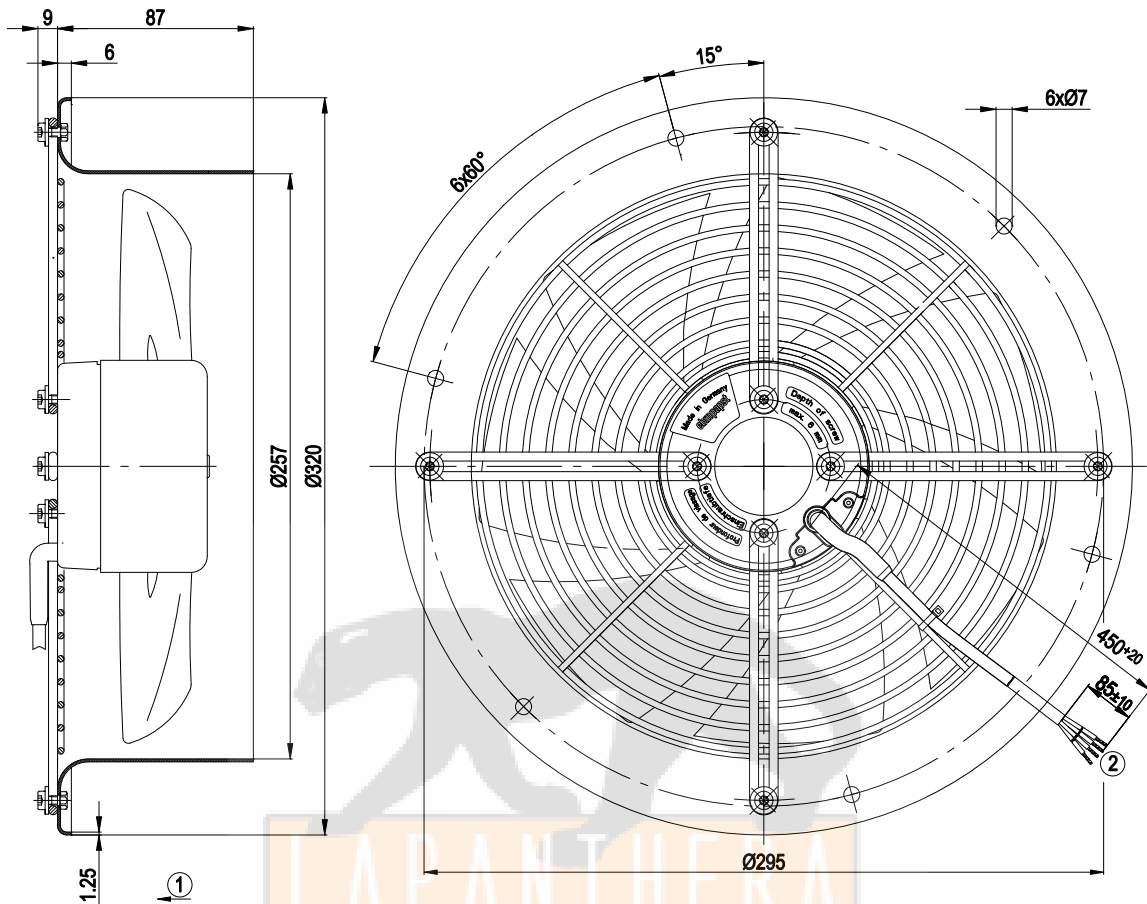
Leakage current	<= 0,25 mA
Size	250 mm
Operation mode	S1
Direction of rotation	Counter-clockwise, seen on rotor
Mounting position	Any
EMC interference emission	Acc. to EN 55022 (Class B)
EMC interference immunity	Acc. to EN 61000-6-2 (industrial environment)
Direction of air flow	"V"
Insulation class	"B"
Cable exit	Lateral
Condensate discharge holes	None
Bearing motor	Ball bearing
Mass	2.85 kg
Material of electronics housing	Die-cast aluminium, coated in black
Material of blades	Sheet steel, coated in black
Material of guard grille	Steel, phosphated and black plastic-coated
Material of wall ring	Sheet steel, pre-galvanised and coated in black plastic
Motor protection	Reverse polarity and locked-rotor protection
Product conforming to standard	EN 60950-1
Surface of rotor	Coated in black
Number of blades	7
Type of protection	IP 42
Protection class	I
Technical features	<ul style="list-style-type: none"> - Control input 0-10 VDC / PWM - Tach output - Motor current limit - Soft start
Max. permissible ambient motor temp. (transp./ storage)	+80 °C
Min. permissible ambient motor temp. (transp./storage)	-40 °C
Approval	CSA C22.2 Nr.77; UL 1004

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Product drawing

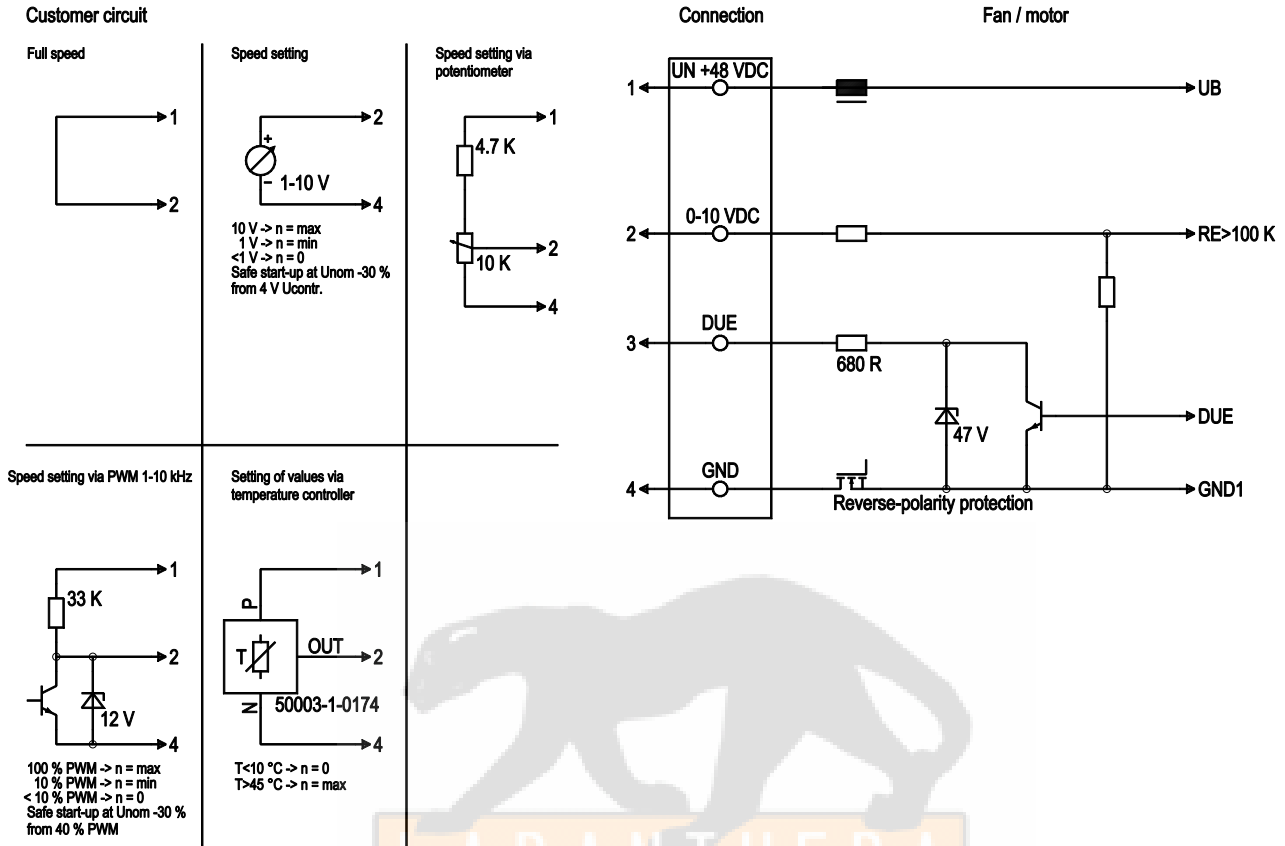


- | | |
|---|--|
| 1 | Direction of air flow "V" |
| 2 | Connecting cable AWG 20, 4 x brass lead tips crimped |

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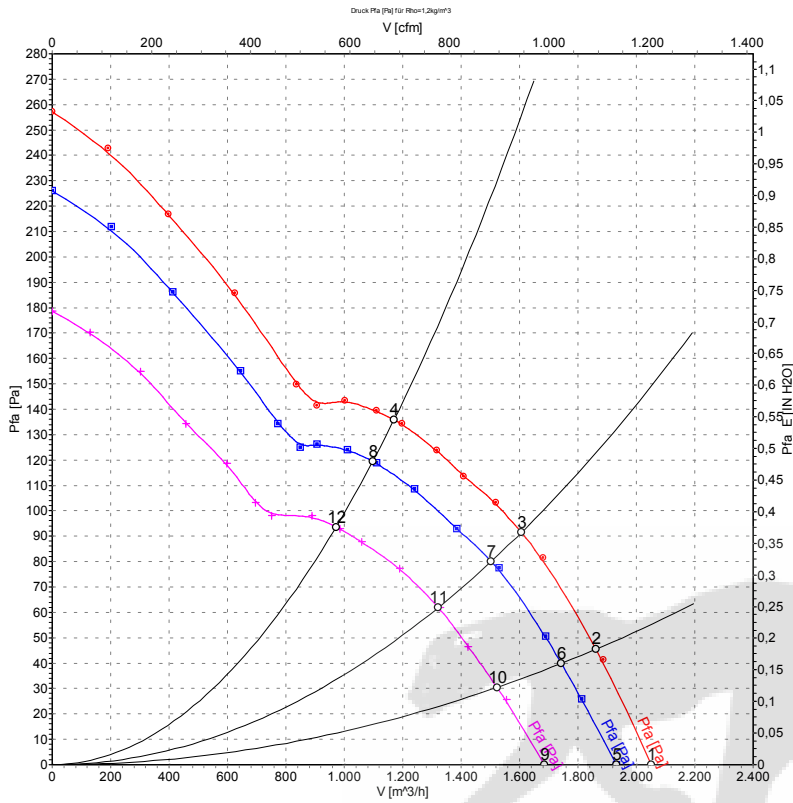
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Connection screen



Line	No.	Signal	Colour	Function / assignment
1	1	Un +48 VDC	red	Power supply 48 VDC, residual ripple 3.5 %
1	2	0-10 VDC	yellow	Control input Re > 100 K
1	3	DUE	white	Speed monitoring output, 3 pulses per rotation, Isink max = 10 mA
1	4	GND	blue	Reference mass

Charts: Air flow



Measurement: LU-54178
 Measurement: LU-54177
 Measurement: LU-54175

Measured values

	U	n	P ₁	I	\hat{V}	p _{fa}
	[V]	[min ⁻¹]	[W]	[A]	[m ³ /h]	[Pa]
1	57	2930	129	2.80	2050	0
2	57	2810	132	2.92	1860	47
3	57	2700	136	3.05	1605	92
4	57	2595	139	3.18	1170	136
5	48	2750	105	2.60	1930	0
6	48	2645	109	2.70	1745	40
7	48	2530	111	2.80	1505	80
8	48	2435	114	2.90	1095	120
9	36	2405	73	2.27	1685	0
10	36	2330	75	2.36	1525	31
11	36	2245	78	2.46	1320	62
12	36	2170	80	2.52	970	94